

### MANASWINI RAO

Contact Information	710A University Hall, UC Berkeley manaswini.rao@gmail.com http://manaswinirao.com +1-(510)-280-4704				
Doctoral Studies	University of California, Berkeley PhD, Agricultural and Resource Economics, Expected completion May 2020 DISSERTATION: "Essays in Empirical Institutional Economics"				
	PRIMARY FIELDS: Development Economics SECONDARY FIELDS: Political Economics, Environment and Resource Economics, Applied Econometrics				
	Professor Aprajit Maha aprajit@berkeley.edu +1 (510) 664-7163 Dept of Agricultural & <u>Professor Elisabeth Sad</u> esadoulet@berkeley.edu Dept of Agricultural &	ffinan@berkeley.edu   +1 (510) 642-7284   Resource Economics Department of Economics and Business Adm   oulet tion	inistra-		
Placement Officers	Professor Sofia Villas-Boas sberto@berkeley.eduProfessor Max Auffhammer auffhammer@berkeley.eduDiana Lazo lazo@berkeley.edu+1 (510) 409-4341+1 (510) 643-5472+1 (510) 642-3345				
Prior Education	University of California B.M.S College of Engine		2010 2004		
Grants, Fellowships, and Awards	2019   The Jean O   900)     2018   IRLE Gradu     2017   ATAI Grant     2017   IGC Grant     2015   Levin Fami     2015   Maharaj Ka     2014   Post Primar     (\$ 10000)   2013     2013   USAID DIV     99,632)   900	The Jean O. Lanjouw Memorial Endowment (\$757); UC Berkeley Conference Travel Grant (\$ 900) IRLE Graduate Student Award (w/ Vaishnavi Surendra) (\$6000) ATAI Grant (w/ Xavier Gine, Aprajit Mahajan, Anup Malani) (\$233,565) IGC Grant for Judicial Efficiency and Economic Outcomes (Aprajit Mahajan (PI)) (£50,000) Levin Family Fellowship (w/ Fiona Burlig and Louis Preonas) (\$ 800) Maharaj Kaul Research Travel Grant (\$ 1000) Post Primary Education Initiative Exploratory Grant (w/ Bastien Michel and Bhavya Srinivasan) (\$ 10000) USAID DIV Award Pilot Stage, (w/ Emily Breza, Arun Chandrasekhar, and Ashish Shenoy) (\$			
Teaching @ UC Berkeley	Dept. ARE and Econ, Dept. ARE, Dept. ARE and Econ, Dept. Economics, Dept. Economics,	Intro to Environmental Economics, Fernando Hoces de la Guardia International Economic Development, Alain de Janvry & Bruce Wydick Economic Development, Aprajit Mahajan Intermediate Macroeconomic Analysis, Steven Wood 20th Century Economic History, Brad DeLong	2020 2017 2016 2010 2009		

Research Papers

#### "Judges, Lenders, and Bottomline: Court-ing Economic Growth in India" (JOB MARKET PAPER) *Coverage:* (Ideas for India Blog-post)(LiveMint).

Abstract. Courts are considered important in the functioning of markets, and yet, there is limited causal evidence showing this. This paper estimates the causal effects of courts' effectiveness on formal sector firm outcomes, illustrating ex-post contract enforcement in local credit markets as an important channel. To show this, I construct a novel panel dataset on court-level variables from 6 million trial-level data across 195 district courts in India and exploit quasi-random variation in judge vacancy for causal identification. There are three key implications of this paper. First, reducing marginal judge vacancy reduces court backlog by 6%. Second, this stimulates bank lending in local credit markets through improved liquidity from debt recoveries. Third, this affects credit availability, production, and profitability of firms located within the court's jurisdiction. The results imply an 8:1 benefit to cost ratio of reducing marginal judge vacancy.

# Research in"Mission Kakatiya: Impact Evaluation of Minor Irrigation Tank Rehabilitation in Telangana" with<br/>Xavier Gine, Aprajit Mahajan, Anup Malani

#### *Pre-analysis plan filed with the AEA RCT Registry* (#AEARCTR-0001821).

Abstract. We evaluate the effects of rehabilitating local village level irrigation tanks on agricultural outcomes using a combination of observational and experimental approaches. Tank irrigation is a common (and climate friendly) mode of irrigation in Southern and Western India, which is based on impounding the surface run-off during rainy season for later use. However, since these are common pool resources, a lack of periodic upkeep had led to excessive silting and therefore, lowered capacity. Mission Kakatiya is a state-wide program in Telangana that aims to rehabilitate over 45000 tanks across the state in multiple phases. We make use of the staggered roll-out of earlier phases to study the impacts and understand the context of implementation in a differences-in-difference framework using a sample of 750 tanks. Further, we validate the findings using an experimental approach where we randomize the order of rehabilitation on a set of 92 tanks.

## **"The Power of Agency: Evidence from India"** with Xavier Gine, Aprajit Mahajan, Anup Malani *Pre-analysis plan filed with the AEA RCT Registry* (#AEARCTR-0004336).

Abstract. Community-driven development (CDD) emphasizes a "bottom-up" approach focusing on community control over planning and implementation decisions to improve development outcomes. We propose to assess the value of community participation in choosing the location and implementation of local infrastructure projects by comparing a participatory "bottom-up" approach to the standard "top-down" planning and implementation where the community only plays a limited role. The context for the study is the construction of minor irrigation channels in the command area of small irrigation tanks in Telangana. The government has recently launched a program to rehabilitate the storage capacity of the tanks but has left the distribution of water from the tank to plots in the command area to the farmers. The research project thus varies the extent of community involvement over the choice and implementation of field channels and assesses its impact on irrigation resource allocation, agricultural outcomes, and continued maintenance.

## "Got (Clean) Milk?: Incentives for Cleanliness in Indian Dairy Cooperatives" with Ashish Shenoy *Pre-analysis plan filed with the AEA RCT Registry* (#AEARCTR-0000700).

We implement a randomized evaluation to pay for lower bacteria count among cooperative dairy producers in rural Karnataka. Incentives for cleaner milk are applied at a group level and paid into a shared cooperative bank account. We further vary whether incentive payments are announced publicly to cooperative members or revealed privately to cooperative management alone. Results show that group incentives are sufficient to improve production quality in village cooperatives. However, this result is sensitive to the way in which incentives are administered. When faced with the prospect of public announcement, managers in a third of cooperatives opt out of receiving incentive payments entirely, undermining any possible incentive effect. Dropout is most common among cooperatives with weaker management oversight. We argue that the decision to opt out only in the face of publicly announced incentives seems inconsistent with the Coase Theroem and other simple models of joint utility maximization.

Research in Progress	<b>"Gender Wage Gap in Agricultural Labor Markets in Rural India"</b> with Vaishnavi Surendra Abstract. We explore the determinants of gender wage gap in the agricultural labor markets in India and examine the role of social norms in perpetuating it. We use multiple approaches to address these questions including analyzing secondary data from ICRISAT VDSA Panel, collecting primary data via surveys to elicit expectations and behavioral parameters to complement the former data source, and finally in a related project, investigate the role gender norms in influencing such behavior perpetuating the wage gap and other labor market outcomes through a lab-in-field experiment.			
Book Chap- ters	de Janvry, A., Rao, M., Sadoulet, E. (2017) Learning for adopting: Technology adoption in developing country agriculture, Ferdi, 120 p., de Janvry, A., Macours K., Sadoulet, E. (eds) (2017)			
Prior Employment	The World Bank, Consultant2J-PAL South Asia, Senior Research Manager (position at the time of exit)2010 - 2The Asian Development Bank, Consultant2009Janaagraha, Associate2006		2014 - Present 2018 2010 - 2014 2009-10 2006-08 2004	
Talks	2020	PacDev 2020, Royal Economic Society Annual Conference 2020	ADE Dant Sam	
	2019	NEUDC (Northwestern U); UC Berkeley Development Econ Seminar Series inar; Berkeley Undergraduate Women in Economics Research Panel	; ARE Dept. Sem-	
	2018	UC Berkeley Development Lunch Series		
	2017	J-PAL South Asia Annual Staff Meet; Intro to Probability and Statistics (DA	KSH)	
	2014	Dept. of Agriculture, Government of Tamil Nadu, India		
	2013	Impact Evaluation of Population, Health and Nutrition Programs, PHFI, New	Delhi, India	
Activities	2015 - 2019	9 Leadership Board and Undergraduate Mentorship, Women in Economics at Berkeley		
	2018 - 2019	ARE PhD Admissions Committee Student Member		
	2015 - 2016	Organizer, Dept. Coffee Hour		
Languages	English (proficient), Hindi (proficient), Kannada (native), Tamil (conversational)			
Skills	R (proficient), Stata (proficient), Python (Intermediate)			